

2 $\frac{3}{8}$ "

Hy-tex
Brick Scales and Tables

HYDRAULIC PRESS BRICK COMPANY
CENTRAL NATIONAL BANK BUILDING
ST. LOUIS, MARCH 1888

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or

Face Brick Tables

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St. Louis

Face Brick Tables

The accompanying five tables of brick-work dimensions cover the great majority of cases that may come up for treatment. Each table, as will be seen, is based on a unit which varies with the width of the mortar joint, increasing by steps of $\frac{1}{8}$ inch up to 1 inch. Tables I and II deal with simple vertical and horizontal units; Tables III, IV and V show dimensions when using the compound units of the horizontal courses in Flemish and Garden Wall Bonds.

They are all figured out on the basis of standard sized rough textured face brick, as officially established by The American Face Brick Association, which is, "approximately" $8'' \times 2\frac{1}{4}'' \times 3\frac{3}{4}''$. The smooth brick is $8'' \times 2\frac{1}{4}'' \times 3\frac{7}{8}''$, differing from the rough brick only $\frac{1}{8}$ " in width. It is, however, very important to keep in mind that clays can not always be made to burn to an exact dimension, so that the architect should carefully measure the particular brick he uses before adding the chosen mortar joint or joints, in order to determine the exact dimension of the unit he is to employ. If he is going to use a brick of mingled shades, it would be well to find the average dimension of the range before adding the mortar joint or joints.

Once having established this unit dimension for any particular piece of work, it will be easily found in the unit line at the head of the table, and this will give the column to be used in the calculations. Thus if you found the brick to run $2\frac{3}{8}''$ instead of $2\frac{1}{4}''$ high, and you wanted to use a $\frac{3}{8}$ " joint, your vertical unit would be $2\frac{3}{4}''$, which you would find in the unit line under the $\frac{1}{2}$ " joint. Of course, the joint you used would be $\frac{3}{8}$ " just the same. Or if you were going to use two Stretcher Garden Wall Bond with a $\frac{1}{2}$ " joint and found your brick $7\frac{7}{8}''$ in length by $3\frac{3}{4}''$ in width, you would have a unit of $2 \times 7\frac{7}{8}'' + 3\frac{3}{4}'' + 3 \times \frac{1}{2}''$ or $21'' = 1'9''$. While this exact dimension can not be found in the unit line, a very near approach or the $1'8\frac{7}{8}''$ unit, under the $\frac{3}{8}$ " joint, will serve, by making a correction of 1" for every eight units of length. As, however, this means a dimension of $14'0''$, the correction would take care of itself by an imperceptible modification of the joint width.

The use of anything less than a header at the quoin should be avoided if possible, though it may serve at openings where the frame or jamb gives it apparent support.

In laying out brickwork, it is very desirable for satisfactory results, to adjust

all horizontal dimensions, so as to come out in a systematic, symmetrical manner as shown in our illustrations.

By consulting the tables, you will find in the proper unit column the exact multiple of brick units which equals or approximates the dimension you have under consideration. If the largest dimension given in the table is less than your dimension, subtract it or, if necessary, its double from your dimension, so that the remainder will come within the table.

If, in any given case, the dimension on your drawings approximates closely that given in the table, the difference can easily be taken up in the mortar joints so as not to destroy the apparent uniformity of the joints in the wall. If the difference is too great for this, it will be better to make a slight change in the dimensions on your drawings. The change at most will be so small as to make no appreciable difference in the building, but it will greatly aid in securing a workmanlike effect in the appearance of the brickwork.

Adjusting vertical dimensions will present no difficulties at all, as the units are so small and constantly uniform. Nor will horizontal courses prove troublesome, unless you are desirous of working out some particular bond pattern uniformly at both sides of the dimension. In that case, a little care must be used in laying out the work. In such bonds as Flemish and Garden Wall, it will be found that some *fraction* of a unit will always have to be added to any exact multiple of units to bring out the right result. Subtract this fraction from your dimension before consulting the table to find the number of whole units. The diagrams suggest possible solutions.

The first thing to do, in laying out any given area in the field, is to establish the base course or courses as a key for the remainder of the work. In Running, English, or Common Bond, one course is sufficient to set the pace for the rest. But in English Cross, Dutch, Flemish and Garden Wall, two or more courses will be necessary to show the cycle of change. Establish the treatment of your corner, then find the fraction over whole units, if any, and after subtracting it from your horizontal dimension, you will have the remainder for comparison with the table.

It is suggested that after the bond has been worked out, a record of the bottom or starting course or courses be placed on the elevations to assist the mason in

beginning the work, and to be assured that the bond will work out at openings and corners as wished.

In case of pattern work, with large or small units, center its center unit, horizontally and vertically, on the area concerned, in order to lay out properly the borders of the work, or to make the pattern end, both laterally and vertically, in a symmetrical manner.

Perhaps the simplest way is to draw a unit of the chosen pattern to scale and lay it on your elevations. The border dimensions will then easily be found, that is, it will show how the pattern ends at top and bottom and corners or openings.

As all diamond brick patterns, which

are the most frequently used, may be enlarged or reduced in length by steps of a header, or one-half brick, which always involves an addition or subtraction of two courses in height, it will be an easy matter to work in any pattern of this kind you want, except in case of narrow spaces. Here simple devices of alternating stretchers, headers, and one-quarter and three-quarter brick may be arranged with pleasing effects, as Diagrams 1-11 may suggest.

There is no end to brick patterns; and when you use the limitless variety of textures, color tones, and mortar joints, the possibilities are almost infinite. Our booklet entitled, *Bonds and Mortars in the Wall of Brick* will prove very helpful. Send for a copy.

Hy-tex Products and Service

“Hy-tex Brick” is a designation that means standard of quality, both in the product itself and in the service given, and represents the widest variety of color tone and texture obtainable in Face Brick.

SMOOTH TEXTURES

1. Hy-tex smooth brick are justly celebrated not only for their perfection of form but for the wide variety of shades they offer in grays, whites, creams, buffs, browns, reds, bronzes, mahogany, and ironspots.

2. Hy-tex Sand Mold brick, which may be regarded as semi-smooth in texture show a very rich and wide range of red, brown, and blackish tones.

3. Hy-tex Golden and Ivory Salt Glaze brick are most desirable because of their durability, cleanliness, and beauty, and are used for interior work to secure sanitary conditions and for exterior walls as proof against city smoke and dust.

4. Hy-tex Equitable Grays with their clear, light-toned, impervious surface are of fire clay and especially suitable in work of a monumental character, where they harmonize admirably with granite, marble, or stone base or trimmings.

5. Hy-tex Enamel brick are unexcelled in quality and durability by any similar brick on the market of domestic or foreign manufacture. They are absolutely opaque and will not craze, peel, or discolor under the severest climatic conditions. They come in whites, creams, greens, blue, and opaque and transparent browns.

ROUGH TEXTURES

Hy-tex brick of this character cover the whole range from soft matte surfaces, horizontally or vertically scored, to the more pronounced weatherproof and oak bark textures. In color, they run through a great variety of shades in reds, browns, gun metals, blues, greens, purples, creams, grays, and buffs, and are offered either in kiln run mixtures or sorted to shade.

SERVICE

The highest quality of service is made possible by our 22 plants and 13 branch offices, together with numerous selling agencies throughout the country; so that we can assure the architect or builder, wherever he may be, that he will get what he wants and must have—PROMPT, EFFICIENT AND RESPONSIBLE SERVICE.

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Brick Tables

VERTICAL DIMENSIONS OF FACE BRICKWORK

Unit—One Brick and Bed Joint ($2\frac{1}{4}$ " + Joint)*

Table I

No. of Brick Courses	WIDTH OF JOINT WITH STANDARD SIZED BRICK														No. of Brick Course					
	$\frac{1}{8}$ Inch		$\frac{1}{4}$ Inch		$\frac{3}{8}$ Inch		$\frac{1}{2}$ Inch		$\frac{5}{8}$ Inch		$\frac{3}{4}$ Inch		$\frac{7}{8}$ Inch							
	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches				
Unit	2	$\frac{3}{8}$			2	$\frac{5}{8}$			2	$\frac{3}{4}$			2	$\frac{7}{8}$	3		3	$\frac{3}{4}$	Unit	
2	4		5		5			5			5		6			6	$\frac{6}{1}$	2		
3	7		7		7			8			8		9			9	$\frac{9}{3}$	3		
4	9		10		10			11			11	1	0		1	1	1	4		
5	11	1	0	1	1		1	1		1	2	1	3		1	3	1	4	5	
6	1	2	1	3	1	3		1	4		1	5	1	6		1	6	1	7	6
7	1	4	1	5	1	6		1	7		1	8	1	9		1	9	1	10	7
8	1	7	1	8	1	9		1	10		1	11		2	0	2	1	2	2	8
9	1	9	1	10	1	11		2	0		2	1	2	3		2	4	2	5	9
10	1	11	2	1	2	2		2	3		2	4	2	6		2	7	2	8	10
11	2	2	2	3	2	4		2	6		2	7	2	9		2	10	2	11	11
12	2	4	2	6	2	7		2	9		2	10	3	0		3	1	3	3	12
13	2	6	2	8	2	10		2	11		3	1	3	3		3	4	3	6	13
14	2	9	2	11	3	0		3	2		3	4	3	6		3	7	3	9	14
15	2	11	3	1	3	3		3	5		3	7	3	9		3	10	4	0	15
16	3	2	3	4	3	6		3	8		3	10		4	0	4	2	4	4	16
17	3	4	3	6	3	8		3	10		4	0	4	3		4	5	4	7	17
18	3	6	3	9	3	11		4	1		4	3	4	6		4	8	4	10	18
19	3	9	3	11	4	1		4	4		4	6	4	9		4	11	5	1	19
20	3	11	4	2	4	4		4	7		4	9	5	0		5	2	5	5	20
21	4	1	4	4	4	7		4	9		5	0	5	3		5	5	5	8	21
22	4	4	4	7	4	9		5	0		5	3	5	6		5	8	5	11	22
23	4	6	4	9	5	0		5	3		5	6	5	9		5	11	6	2	23
24	4	9	5	0	5	3		5	6		5	9		6	0	6	3	6	6	24
25	4	11	5	2	5	5		5	8		5	11	6	3		6	6	6	9	25
26	5	1	5	5	5	8		5	11		6	2	6	6		6	9	7	0	26
27	5	4	5	7	5	10		6	2		6	5	6	9		7	0	7	3	27
28	5	6	5	10	6	1		6	5		6	8	7	0		7	3	7	7	28
29	5	8	6	0	6	4		6	7		6	11	7	3		7	6	7	10	29
30	5	11	6	3	6	6		6	10		7	2	7	6		7	9	8	1	30
31	6	1	6	5	6	9		7	1		7	5	7	9		8	0	8	4	31
32	6	4	6	8	7	0		7	4		7	8		8	0	8	4	8	8	32
33	6	6	6	10	7	2		7	6		7	10	8	3		8	7	8	11	33
34	6	8	7	1	7	5		7	9		8	1	8	6		8	10	9	2	34
35	6	11	7	3	7	7		8	0		8	4	8	9		9	1	9	5	35
36	7	1	7	6	7	10		8	3		8	7	9	0		9	4	9	9	36
37	7	3	7	8	8	1		8	5		8	10	9	3		9	7	10	0	37
38	7	6	7	11	8	3		8	8		9	1	9	6		9	10	10	3	38
39	7	8	8	1	8	6		8	11		9	4	9	9		10	1	10	6	39
40	7	11	8	4	8	9		9	2		9	7		10	0	10	5	10	10	40
41	8	1	8	6	8	11		9	4		9	9	10	3		10	8	11	1	41
42	8	3	8	9	9	2		9	7		10	0	10	6		10	11	11	4	42
43	8	6	8	11	9	4		9	10		10	3	10	9		11	2	11	7	43
44	8	8	9	2	9	7		10	1		10	6	11	0		11	5	11	11	44
45	8	10	9	4	9	10		10	3		10	9	11	3		11	8	12	2	45
46	9	1	9	7	10	0		10	6		11	0	11	6		11	11	12	5	46
47	9	3	9	9	10	3		10	9		11	3	11	9		12	2	12	8	47
48	9	6	10	0	10	6		11	0		11	6		12	0	12	6	13	0	48
49	9	8	10	2	10	8		11	2		11	8	12	3		12	9	13	3	49
50	9	10	10	5	10	11		11	5		11	11	12	6		13	0	13	6	50

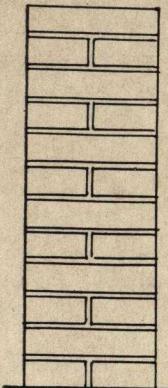
NOTE.—If the vertical dimensions of window and other openings are figured to the top of the steel lintel, add the width of one joint to the height of the opening and subtract the width of one joint from vertical space between the openings.

See diagrams on reverse side.

*This table also gives horizontal dimensions for Rowlock and Soldier Courses.

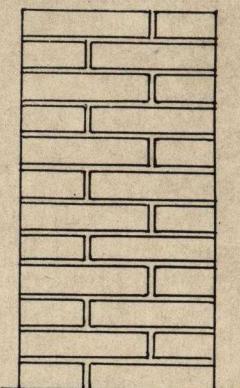
Suggestions for Narrow Vertical Spaces

Diagram 1



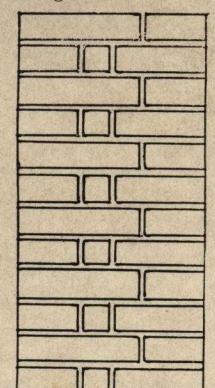
One Brick

Diagram 2



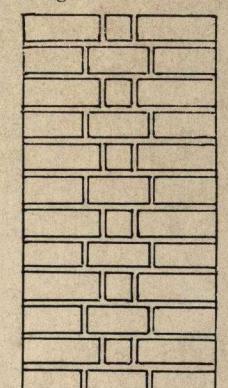
One and a Half Brick

Diagram 3



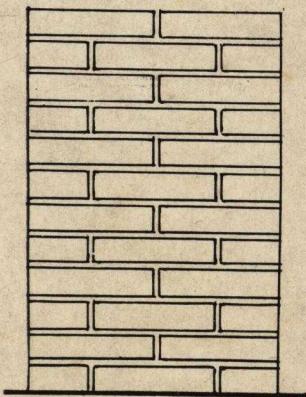
One and a Half Brick

Diagram 4



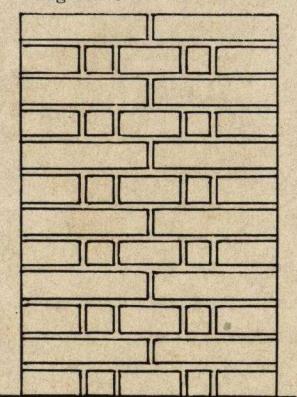
One and a Half Brick

Diagram 5



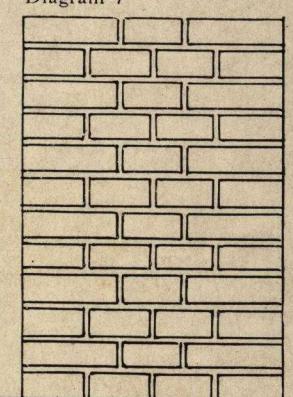
Two Brick

Diagram 6



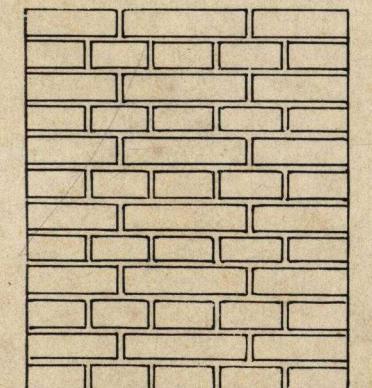
Two Brick

Diagram 7



Two Brick

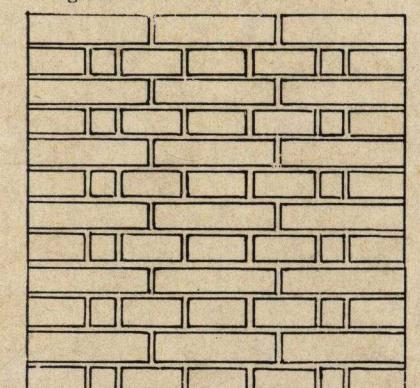
Diagram 8



Two and a Half Brick

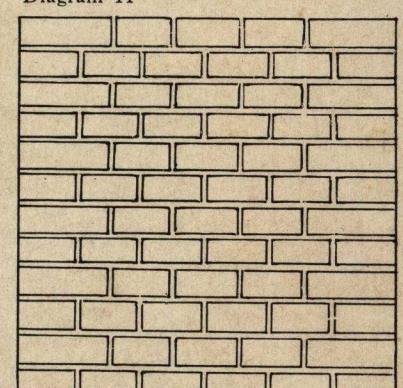
Hy-tex
The Standard of Quality in Brick.

Diagram 10



Three Brick

Diagram 11



Three Brick

Hydraulic-Press Brick Company

St. Louis

Brick Tables

HORIZONTAL DIMENSIONS FOR STRETCHERS

Unit=Stretcher and End Joint (8"+Joint)*

Table II

No. of Units	WIDTH OF JOINT WITH STANDARD SIZED BRICK												No. of Units				
	1/8 Inch		1/4 Inch		3/8 Inch		1/2 Inch		5/8 Inch		3/4 Inch		7/8 Inch				
	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches			
Unit	8 1/8		8 1/4		8 3/8		8 1/2		8 5/8		8 3/4		8 7/8		9	Unit	
2	1	4 1/4	1	4 1/2	1	4 3/4	1	5	1	5 1/4	1	5 1/2	1	5 3/4	1	6	2
3	2	0 3/8	2	0 3/4	2	1 1/8	2	1 1/2	2	1 7/8	2	2 1/4	2	2 5/8	2	3	3
4	2	8 1/2	2	9	2	9 1/2	2	10	2	10 1/2	2	11	2	11 1/2	3	0	4
5	3	4 5/8	3	5 1/4	3	5 7/8	3	6 1/2	3	7 1/8	3	7 3/4	3	8 3/8	3	9	5
6	4	0 3/4	4	1 1/2	4	2 1/4	4	3	4	3 3/4	4	4 1/2	4	5 1/4	4	6	6
7	4	8 7/8	4	9 3/4	4	10 5/8	4	11 1/2	5	0 3/8	5	1 1/4	5	2 1/8	5	3	7
8	5	5	5	6	5	7	5	8	5	9	5	10	5	11	6	0	8
9	6	1 1/8	6	2 1/4	6	3 3/8	6	4 1/2	6	5 5/8	6	6 3/4	6	7 7/8	6	9	9
10	6	9 1/4	6	10 1/2	6	11 3/4	7	1	7	2 1/4	7	3 1/2	7	4 3/4	7	6	10
11	7	5 3/8	7	6 3/4	7	8 1/8	7	9 1/2	7	10 7/8	8	0 1/4	8	1 5/8	8	3	11
12	8	1 1/2	8	3	8	4 1/2	8	6	8	7 1/2	8	9	8	10 1/2	9	0	12
13	8	9 5/8	8	11 1/4	9	0 7/8	9	2 1/2	9	4 1/8	9	5 3/4	9	7 3/8	9	9	13
14	9	5 3/4	9	7 1/2	9	9 1/4	9	11	10	0 3/4	10	2 1/2	10	4 1/4	10	6	14
15	10	1 7/8	10	3 3/4	10	5 5/8	10	7 1/2	10	9 3/8	10	11 1/4	11	1 1/8	11	3	15
16	10	10	11	0	11	2	11	4	11	6	11	8	11	10	12	0	16
17	11	6 1/8	11	8 1/4	11	10 3/8	12	0 1/2	12	2 5/8	12	4 3/4	12	6 7/8	12	9	17
18	12	2 1/4	12	4 1/2	12	6 3/4	12	9	12	11 1/4	13	1 1/2	13	3 3/4	13	6	18
19	12	10 3/8	13	0 3/4	13	3 1/8	13	5 1/2	13	7 7/8	13	10 1/4	14	0 5/8	14	3	19
20	13	6 1/2	13	9	13	11 1/2	14	2	14	4 1/2	14	7	14	9 1/2	15	0	20
21	14	2 5/8	14	5 1/4	14	7 7/8	14	10 1/2	15	1 1/8	15	3 3/4	15	6 3/8	15	9	21
22	14	10 3/4	15	1 1/2	15	4 1/4	15	7	15	9 3/4	16	0 1/2	16	3 1/4	16	6	22
23	15	6 7/8	15	9 3/4	16	0 5/8	16	3 1/2	16	6 3/8	16	9 1/4	17	0 1/8	17	3	23
24	16	3	16	6	16	9	17	0	17	3	17	6	17	9	18	0	24
25	16	11 1/8	17	2 1/4	17	5 3/8	17	8 1/2	17	11 5/8	18	2 3/4	18	5 7/8	18	9	25
26	17	7 1/4	17	10 1/2	18	1 3/4	18	5	18	8 1/4	18	11 1/2	19	2 3/4	19	6	26
27	18	3 3/8	18	6 3/4	18	10 1/8	19	1 1/2	19	4 7/8	19	8 1/4	19	11 5/8	20	3	27
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29	19	7 5/8	19	11 1/4	20	2 7/8	20	6 1/2	20	10 1/8	21	1 3/4	21	5 3/8	21	9	29
30	20	3 3/4	20	7 1/2	20	11 1/4	21	3	21	6 3/4	21	10 1/2	22	2 1/4	22	6	30
31	20	11 7/8	21	3 3/4	21	7 5/8	21	11 1/2	22	3 3/8	22	7 1/4	22	11 1/8	23	3	31
32	21	8	22	0	22	4	22	8	23	0	23	4	23	8	24	0	32
33	22	4 1/8	22	8 1/4	23	0 3/8	23	4 1/2	23	8 5/8	24	0 3/4	24	4 7/8	24	9	33
34	23	0 1/4	23	4 1/2	23	8 3/4	24	1	24	5 1/4	24	9 1/2	25	1 3/4	25	6	34
35	23	8 3/8	24	0 3/4	24	5 1/8	24	9 1/2	25	1 7/8	25	6 1/4	25	10 5/8	26	3	35
36	24	4 1/2	24	9	25	1 1/2	25	6	25	10 1/2	26	3	26	7 1/2	27	0	36
37	25	0 5/8	25	5 1/4	25	9 7/8	26	2 1/2	26	7 1/8	26	11 3/4	27	4 3/8	27	9	37
38	25	8 3/4	26	1 1/2	26	6 1/4	26	11	27	3 3/4	27	8 1/2	28	1 1/4	28	6	38
39	26	4 7/8	26	9 3/4	27	2 5/8	27	7 1/2	28	0 3/8	28	5 1/4	28	10 1/8	29	3	39
40	27	1	27	6	27	11	28	4	28	9	29	2	29	7	30	0	40
41	27	9 1/8	28	2 1/4	28	7 3/8	29	0 1/2	29	5 5/8	29	10 3/4	30	3 7/8	30	9	41
42	28	5 1/4	28	10 1/2	29	3 3/4	29	9	30	2 1/4	30	7 1/2	31	0 3/4	31	6	42
43	29	1 3/8	29	6 3/4	30	0 1/8	30	5 1/2	30	10 7/8	31	4 1/4	31	9 5/8	32	3	43
44	29	9 1/2	30	3	30	8 1/2	31	2	31	7 1/2	32	1	32	6 1/2	33	0	44
45	30	5 5/8	30	11 1/4	31	4 7/8	31	10 1/2	32	4 1/8	32	9 3/4	33	3 3/8	33	9	45
46	31	1 3/4	31	7 1/2	32	1 1/4	32	7	33	0 3/4	33	6 1/2	33	0 1/4	34	6	46
47	31	9 7/8	32	3 3/4	32	9 5/8	33	3 1/2	33	9 3/8	34	3 1/4	34	9 1/8	35	3	47
48	32	6	33	0	33	6	34	0	34	6	35	0	35	6	36	0	48
49	33	2 1/8	33	8 1/4	34	2 3/8	34	8 1/2	35	2 5/8	35	8 3/4	36	2 7/8	36	9	49
50	33	10 1/4	34	4 1/2	34	10 3/4	35	5	35	11 1/4	36	5 1/2	36	11 3/4	37	6	50

NOTE—In figuring the horizontal dimensions of window and other openings, add the width of one joint to the width of the opening and subtract the width of one joint from the piers.

See diagrams on reverse side.

*As in Running, Common, or English Bond. When necessary, any dimension may be adjusted by half units.

Suggestions in Bonds

RUNNING BOND

The smallest dimension here available is one brick or one and a half brick, as indicated by the dotted lines.

By dropping or adding a whole brick, this simple bond is maintained with the corner headers remaining in the same courses. By dropping or adding a half brick, the headers at the corners will come in alternate courses.

COMMON BOND

The smallest dimension here available is one brick and two half brick, or a two-brick length, as indicated by the dotted lines.

The same rule applies here as in Running Bond.

ENGLISH BOND

The smallest dimension here available is two brick, as shown by the dotted line.

To maintain this form of English Bond, the only change possible is to drop or to add a whole brick; but a half brick may be dropped or added, if the form of bond in Diagram 15 will meet the requirement.

ENGLISH BOND

The smallest dimension here available is one brick plus two three-quarter brick; or less desirable, two three-quarter brick, as indicated by the dotted line.

To maintain this form of English Bond, drop or add a whole brick. One-half brick either way will compel the use of Diagram 14.

ENGLISH CROSS BOND

The smallest dimension here available is three brick plus two half brick, or four brick in length, as indicated by the dotted line.

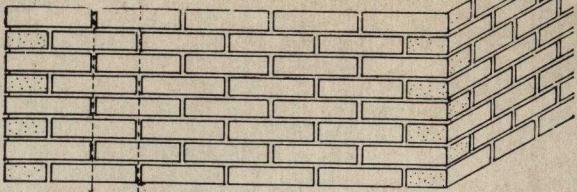
One brick dropped or added will maintain this bond, but the change of a half brick will enforce the use of Diagram 17.

DUTCH BOND

The smallest dimension here available is one brick, two half brick and two three-quarter brick, or three and a half brick in length, as indicated by the dotted line.

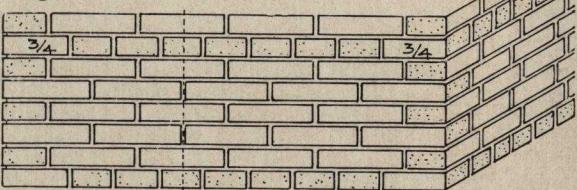
One brick added or dropped will not change this bond, but a half brick either way leads to the use of Diagram 16.

Diagram 12



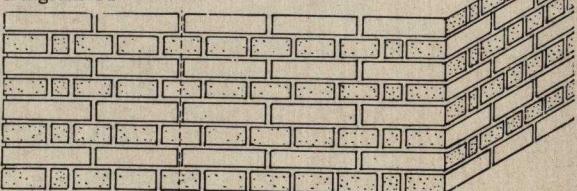
Horizontal dimensions in terms of whole units

Diagram 13



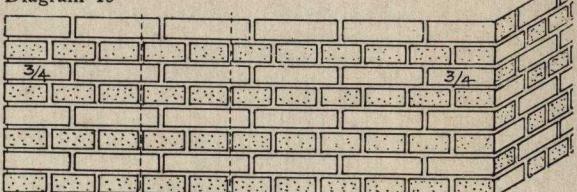
Horizontal dimensions in terms of whole units

Diagram 14



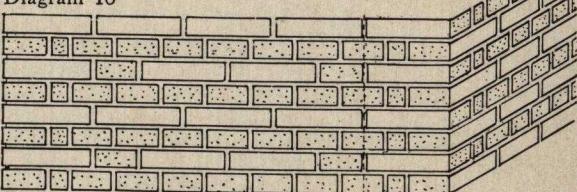
Horizontal dimensions in terms of whole units

Diagram 15



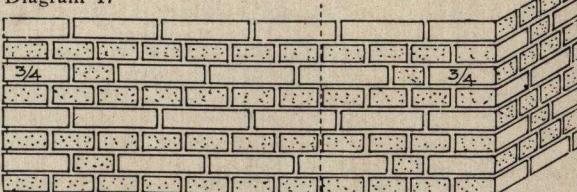
Horizontal dimensions in terms of whole units plus a half unit

Diagram 16



Horizontal dimensions in terms of whole units

Diagram 17



Horizontal dimensions in terms of whole units, plus a half unit

Hydraulic-Press Brick Company

St. Louis

Brick Tables

HORIZONTAL DIMENSIONS FOR FLEMISH BOND

Unit—Stretcher, Header, and 2 End Joints (8" + 3 3/4" + 2 Joints)*

Table III

No. of Units	WIDTH OF JOINT WITH STANDARD SIZED BRICK												No. of Units				
	1/8 Inch		1/4 Inch		3/8 Inch		1/2 Inch		5/8 Inch		3/4 Inch		7/8 Inch		1 Inch		
	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	
Unit 1	1	0	1	0 1/4	1	0 1/2	1	0 3/4	1	1	1	1 1/4	1	1 1/2	1	1 3/4	Unit
2	2	0	2	0 1/2	2	1	2	1 1/2	2	2	2	2 1/2	2	3	2	3 1/2	2
3	3	0	3	0 3/4	3	1 1/2	3	2 1/4	3	3	3	3 3/4	3	4 1/2	3	5 1/4	3
4	4	0	4	1	4	2	4	3	4	4	4	5	4	6	4	7	4
5	5	0	5	1 1/4	5	2 1/2	5	3 3/4	5	5	5	6 1/4	5	7 1/2	5	8 3/4	5
6	6	0	6	1 1/2	6	3	6	4 1/2	6	6	6	7 1/2	6	9	6	10 1/2	6
7	7	0	7	1 3/4	7	3 1/2	7	5 1/4	7	7	7	8 3/4	7	10 1/2	8	0 1/4	7
8	8	0	8	2	8	4	8	6	8	8	8	10	9	0	9	2	8
9	9	0	9	2 1/4	9	4 1/2	9	6 3/4	9	9	9	11 1/4	10	1 1/2	10	3 3/4	9
10	10	0	10	2 1/2	10	5	10	7 1/2	10	10	11	0 1/2	11	3	11	5 1/2	10
11	11	0	11	2 3/4	11	5 1/2	11	8 1/4	11	11	12	1 3/4	12	4 1/2	12	7 1/4	11
12	12	0	12	3	12	6	12	9	13	0	13	3	13	6	13	9	12
13	13	0	13	3 1/4	13	6 1/2	13	9 3/4	14	1	14	4 1/4	14	7 1/2	14	10 3/4	13
14	14	0	14	3 1/2	14	7	14	10 1/2	15	2	15	5 1/2	15	9	16	0 1/2	14
15	15	0	15	3 3/4	15	7 1/2	15	11 1/4	16	3	16	6 3/4	16	10 1/2	17	2 1/4	15
16	16	0	16	4	16	8	17	0	17	4	17	8	18	0	18	4	16
17	17	0	17	4 1/4	17	8 1/2	18	0 3/4	18	5	18	9 1/4	19	1 1/2	19	5 3/4	17
18	18	0	18	4 1/2	18	9	19	1 1/2	19	6	19	10 1/2	20	3	20	7 1/2	18
19	19	0	19	4 3/4	19	9 1/2	20	2 1/4	20	7	20	11 3/4	21	4 1/2	21	9 1/4	19
20	20	0	20	5	20	10	21	3	21	8	22	1	22	6	22	11	20
21	21	0	21	5 1/4	21	10 1/2	22	3 3/4	22	9	23	2 1/4	23	7 1/2	24	0 3/4	21
22	22	0	22	5 1/2	22	11	23	4 1/2	23	10	24	3 1/2	24	9	25	2 1/2	22
23	23	0	23	5 3/4	23	11 1/2	24	5 1/4	24	11	25	4 3/4	25	10 1/2	26	4 1/4	23
24	24	0	24	6	25	0	25	6	26	0	26	6	27	0	27	6	24
25	25	0	25	6 1/4	26	0 1/2	26	6 3/4	27	1	27	7 1/4	28	1 1/2	28	7 3/4	25
26	26	0	26	6 1/2	27	1	27	7 1/2	28	2	28	8 1/2	29	3	29	9 1/2	26
27	27	0	27	6 3/4	28	1 1/2	28	8 1/4	29	3	29	9 3/4	30	4 1/2	30	11 1/4	27
28	28	0	28	7	29	2	29	9	30	4	30	11	31	6	32	1	28
29	29	0	29	7 1/4	30	2 1/2	30	9 3/4	31	5	32	0 1/4	32	7 1/2	33	2 3/4	29
30	30	0	30	7 1/2	31	3	31	10 1/2	32	6	33	1 1/2	33	9	34	4 1/2	30
31	31	0	31	7 3/4	32	3 1/2	32	11 1/4	33	7	34	2 3/4	34	10 1/2	35	6 1/4	31
32	32	0	32	8	33	4	34	0	34	8	35	4	36	0	36	8	32
33	33	0	33	8 1/4	34	4 1/2	35	0 3/4	35	9	36	5 1/4	37	1 1/2	37	9 3/4	33
34	34	0	34	8 1/2	35	5	36	1 1/2	36	10	37	6 1/2	38	3	38	11 1/2	34
35	35	0	35	8 3/4	36	5 1/2	37	2 1/4	37	11	38	7 3/4	39	4 1/2	40	1 1/4	35
36	36	0	36	9	37	6	38	3	39	0	39	9	40	6	41	3	36
37	37	0	37	9 1/4	38	6 1/2	39	3 3/4	40	1	40	10 1/4	41	7 1/2	42	4 3/4	37
38	38	0	38	9 1/2	39	7	40	4 1/2	41	2	41	11 1/2	42	9	43	6 1/2	38
39	39	0	39	9 3/4	40	7 1/2	41	5 1/4	42	3	43	0 3/4	43	10 1/2	44	8 1/4	39
40	40	0	40	10	41	8	42	6	43	4	44	2	45	0	45	10	40
41	41	0	41	10 1/4	42	8 1/2	43	6 3/4	44	5	45	3 1/4	46	1 1/2	46	11 3/4	41
42	42	0	42	10 1/2	43	9	44	7 1/2	45	6	46	4 1/2	47	3	48	1 1/2	42
43	43	0	43	10 3/4	44	9 1/2	45	8 1/4	46	7	47	5 3/4	48	4 1/2	49	3 1/4	43
44	44	0	44	11	45	10	46	9	47	8	48	7	49	6	50	5	44
45	45	0	45	11 1/4	46	10 1/2	47	9 3/4	48	9	49	8 1/4	50	7 1/2	51	6 3/4	45
46	46	0	46	11 1/2	47	11	48	10 1/2	49	10	50	9 1/2	51	9	52	8 1/2	46
47	47	0	47	11 3/4	48	11 1/2	49	11 1/4	50	11	51	10 3/4	52	10 1/2	53	10 1/4	47
48	48	0	49	0	50	0	51	0	52	0	53	0	54	0	55	0	48
49	49	0	50	0 1/4	51	0 1/2	52	0 3/4	53	1	54	1 1/4	55	1 1/2	56	1 3/4	49
50	50	0	51	0 1/2	52	1	53	1 1/2	54	2	55	2 1/2	56	3	57	3 1/2	50

NOTE—In figuring the horizontal dimensions of window and other openings, add the width of one joint to the width of the opening and subtract the width of one joint from the piers.

*If a 3 1/8" header is used, add 1/8" to respective unit employed and multiply by number of units required for your dimension with the 3 3/4" header.

See diagrams on reverse side.

Suggestions in the Treatment of Openings

Hy tex
The Standard of Quality in Brick

FLEMISH BOND

The smallest dimension here available is one unit plus one brick, as indicated by the dotted line.

To maintain this form of Bond a unit must be dropped or added. By dropping a half brick, you must use the quoin in Diagram 19.

FLEMISH BOND

The smallest dimension here available is two units plus one header, or, less desirable, one unit plus one header as indicated by the dotted lines.

This form of Flemish Bond is maintained by adding or dropping a whole unit. Adding a half brick will necessitate the use of the quoin in Diagram 18.

Diagrams 18 and 19 show a few of the ways in which Flemish Bond may be finished at corners and openings. As horizontal dimensions in Flemish Bond never work out in multiples of whole units, the finish on corners or openings must be carefully considered.

When dimensioning piers and openings, consideration should always be given to the bond, and so far as possible such frames be adopted as permit a symmetrical finish of the brickwork.

Various symmetrical treatments at jambs may be worked out, but they are not always in

Diagram 18

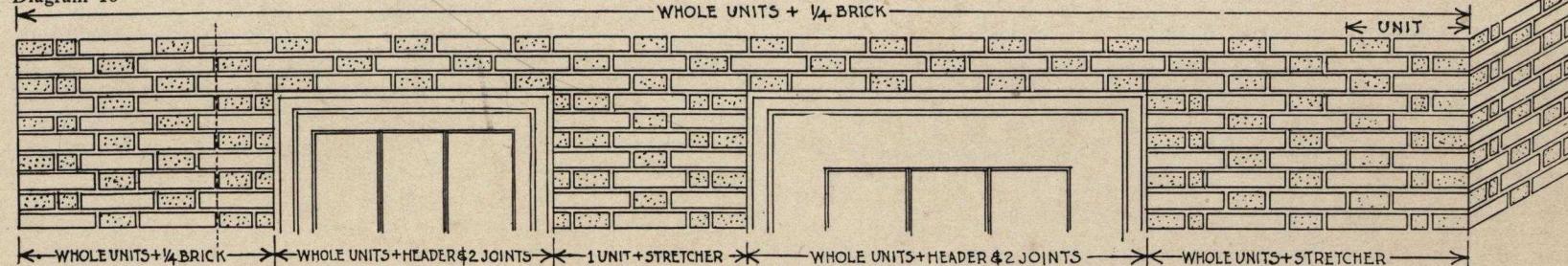
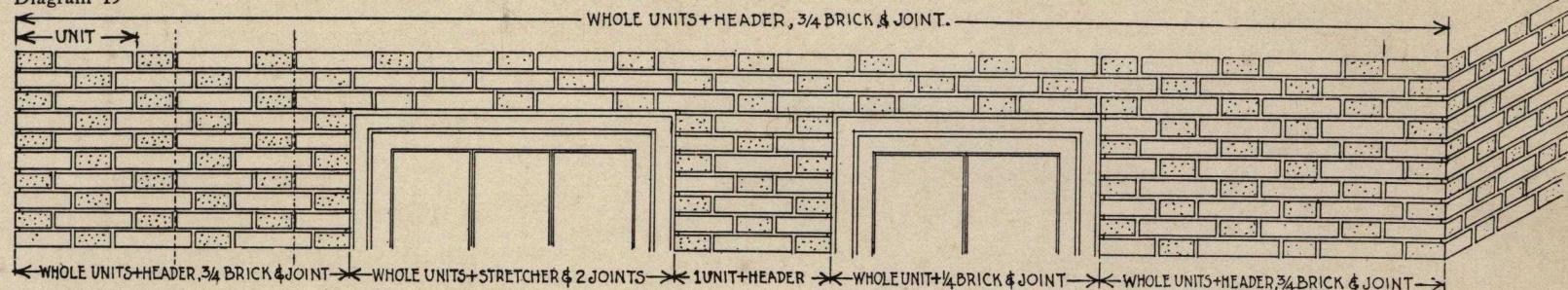


Diagram 19



harmony with the nature of the bond employed.

You will see in the four examples of openings given above, four possibilities in finishing the brickwork in a symmetrical way, consistently with the nature of the bond itself.

In Flemish Bond, openings or piers can never be laid out in terms of whole or half units, if consistent symmetry on both sides of opening or pier is desired. Some odd fraction of a unit must be included in the dimension. But having once established an opening, it can be shifted or enlarged, without destroying the designed sym-

metry, by a whole or half unit at a time. But this change of a half unit, that is, three-quarters of a brick, will slightly disturb the symmetry by one course, as shown in Diagram 19.

In English Bond the shift of a quarter brick may be made without affecting vitally the symmetry of an opening. But in English Cross and Dutch Bond, it is important to note that openings and piers must be laid out in whole units to secure symmetry; in consequence of which to preserve symmetry, an opening must be shifted at least a whole unit or one brick.

Hydraulic-Press Brick Company

St. Louis

Brick Tables

HORIZONTAL DIMENSIONS TWO-STRETCHER GARDEN WALL BOND

Unit—2 Stretchers, 1 Header, and 3 End Joints (8"+8"+3¾"+3 Joints)*

Table IV

No. of Units	WIDTH OF JOINT WITH STANDARD SIZED BRICK												No. of Units			
	⅛ Inch		¼ Inch		⅜ Inch		½ Inch		⅝ Inch		¾ Inch		⅞ Inch			
	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches	Feet	Inches		
Unit	1	8⅛	1	8½	1	8⅞	1	9¼	1	9½	1	10	1	10⅓	1	10⅓
2	3	4⅓	3	5	3	5⅓	3	6½	3	7¼	3	8	3	8⅓	3	9½
3	5	0⅓	5	1½	5	2⅓	5	3⅓	5	4⅓	5	6	5	7½	5	8½
4	6	8½	6	10	6	11½	7	1	7	2½	7	4	7	5½	7	7
5	8	4⅓	8	6½	8	8⅓	8	10¼	9	0⅓	9	2	9	3⅓	9	5½
6	10	0⅓	10	3	10	5¼	10	7½	10	9¾	11	0	11	2½	11	4½
7	11	8⅓	11	11½	12	2½	12	4¾	12	7¾	12	10	13	0⅓	13	3½
8	13	5	13	8	13	11	14	2	14	5	14	8	14	11	15	2
9	15	1⅓	15	4½	15	7¾	15	11¼	16	2½	16	6	16	9¾	17	0⅓
10	16	9¼	17	1	17	4¾	17	8½	18	0¼	18	4	18	7¾	18	11½
11	18	5¾	18	9½	19	1⅓	19	5¾	19	9¾	20	2	20	6½	20	10¼
12	20	1½	20	6	20	10½	21	3	21	7½	22	0	22	4½	22	9
13	21	9½	22	2½	22	7¾	23	0¼	23	5½	23	10	24	2½	24	7¾
14	23	5¾	23	11	24	4½	24	9½	25	2¾	25	8	26	1¼	26	6½
15	25	1⅓	25	7½	26	1⅓	26	6¾	27	0¾	27	6	27	11½	28	5½
16	26	10	27	4	27	10	28	4	28	10	29	4	29	10	30	4
17	28	6⅓	29	0½	29	6¾	30	1¼	30	7½	31	2	31	8¾	32	2¾
18	30	2¼	30	9	31	3¾	31	10½	32	5¼	33	0	33	6¾	34	1½
19	31	10¾	32	5½	33	0¾	33	7¾	34	2½	34	10	35	5½	36	0¼
20	33	6½	34	2	34	9½	35	5	36	0½	36	8	37	3½	37	11
21	35	2½	35	10½	36	6¾	37	2½	37	10½	38	6	39	1¾	39	9¾
22	36	10¾	37	7	38	3¼	38	11½	39	7¾	40	4	41	0¼	41	8½
23	38	6¾	39	3½	40	0¾	40	8¾	41	5¾	41	2	42	10½	43	7¼

HORIZONTAL DIMENSIONS THREE-STRETCHER GARDEN WALL BOND

Unit—3 Stretchers, 1 Header, and 4 End Joints (8"+8"+8"+3¾"+4 Joints)*

Unit	2	4⅓	2	4¾	2	5½	2	5¾	2	6½	2	6¾	2	7¼	2	7¾	Unit
	4	8½	4	9½	4	10½	4	11½	5	0½	5	1½	5	2½	5	3½	
3	7	0¾	7	2½	7	3¾	7	5¼	7	6¾	7	8¼	7	9¾	7	11½	3
4	9	5	9	7	9	9	9	11	10	1	10	3	10	5	10	7	4
5	11	9¼	11	11¾	12	2½	12	4¾	12	7½	12	9¾	13	0¼	13	2¾	5
6	14	1½	14	4½	14	7½	14	10½	15	1½	15	4½	15	7½	15	10½	6
7	16	5¾	16	9¼	17	0¾	17	4½	17	7¾	17	11½	18	2¾	18	6½	7
8	18	10	19	2	19	6	19	10	20	2	20	6	20	10	21	2	8
9	21	2½	21	6¾	21	11¼	22	3¾	22	8½	23	0¾	23	5½	23	9¾	9
10	23	6½	23	11½	24	4½	24	9½	25	2½	25	7½	26	0½	26	5½	10
11	25	10¾	26	4½	26	9¾	27	3½	27	8¾	28	2½	28	7¾	29	1½	11
12	28	3	28	9	29	3	29	9	30	3	30	9	31	3	31	9	12
13	30	7¼	31	1¾	31	8¼	32	2¾	32	9¼	33	3¾	33	10¼	34	4¾	13
14	32	11½	33	6½	34	1½	34	8½	35	3½	35	10½	36	5½	37	0½	14
15	35	3¾	35	11¼	36	6¾	37	2½	37	9¾	38	5¼	39	0¾	39	8½	15
16	37	8	38	4	39	0	39	8	40	4	41	0	41	8	42	4	16
17	40	0¼	40	8¾	41	5¼	42	1¾	42	10½	43	6¾	44	3¼	44	11¾	17
18	42	4½	43	1½	43	10½	44	7½	45	4½	46	1½	46	10½	47	7½	18
19	44	8¾	45	6¼	46	3¾	47	1½	47	10¾	48	8½	49	5¾	50	3½	19
20	47	1	47	11	48	9	49	7	50	5	51	3	52	1	52	11	20
21	49	5¼	50	3¾	51	2½	52	0¾	52	11½	53	9¾	54	8½	55	6¾	21
22	51	9½	52	8½	53	7½	54	6½	55	5½	56	4½	57	3½	58	2½	22
23	54	1¾	55	1¼	56	0¾	57	0¼	57	11¾	58	11¼	59	10¾	60	10½	23

No. of Units ⅛ Inch ¼ Inch ⅜ Inch ½ Inch ⅝ Inch ¾ Inch ⅞ Inch 1 Inch No. of Units

NOTE—In figuring the horizontal dimensions of window and other openings, add the width of one joint to the width of the opening and subtract the width of one joint from the piers.

*If a 3¾" header is used, add ½" to respective unit employed and multiply by number of units required for your dimension with the 3¾" header.

See diagrams on reverse side.

Suggestions in the Treatment of Openings

Hy-tex

The Standard of Quality in Brick.

GARDEN WALL BONDS

Garden Wall Bond differs from Flemish in that a group of two, three, or even more stretchers alternate with headers. By shifting the position of the header, a great variety of pattern effects may be secured. Each pattern must be worked out by itself, but once you settle on the start at corners or openings, the tables will give the multiples of whole units in Two and Three-Stretcher Garden Wall Bond.

By a little trouble and a slight change in the position of the opening, a much more attractive result may often be secured at openings. The illustrations show examples of symmetrical treatment at jambs.

ADJUSTING BONDS

On walls of fixed length, an adjustment of the bond is necessary and is usually made in the middle or ends of the wall. In Diagram 22 the adjustment is made in the middle of the wall by dropping one stretcher from the unit.

Diagram 20

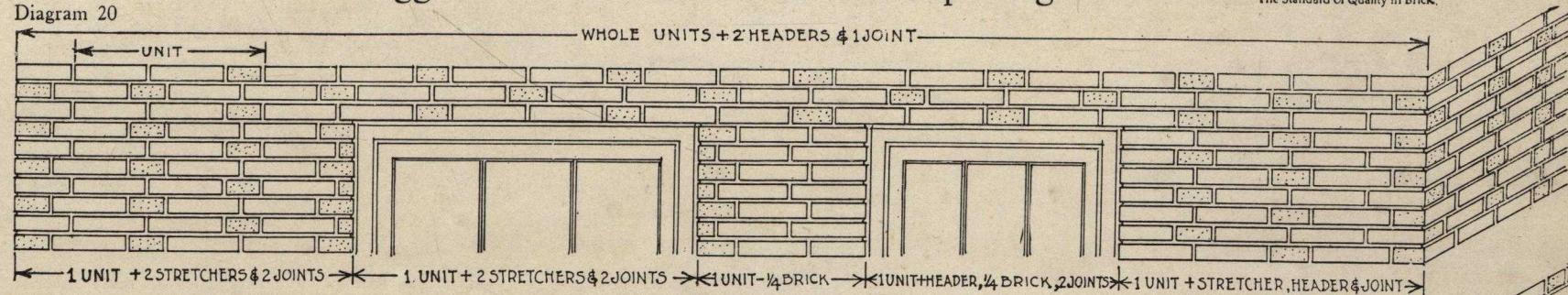


Diagram 21

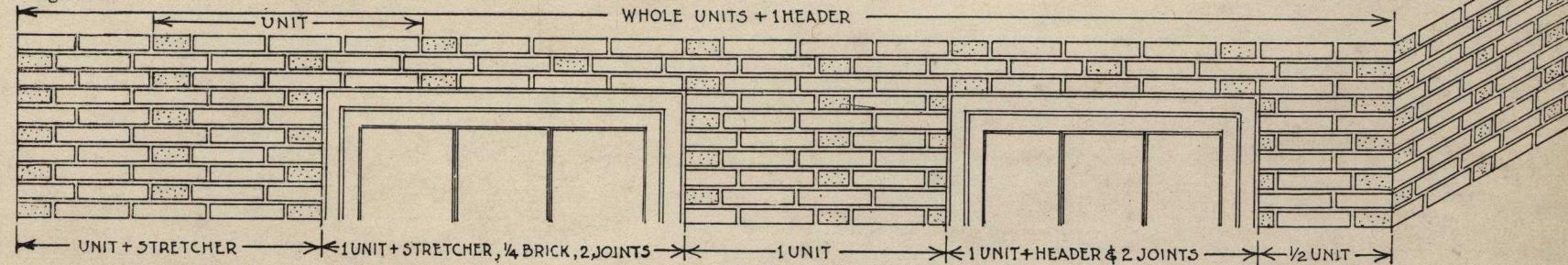
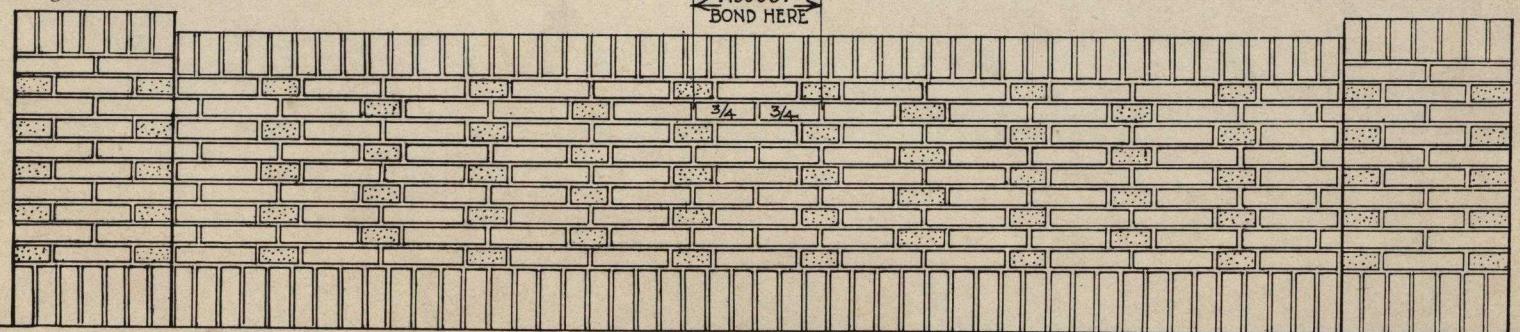


Diagram 22



Hydraulic-Press Brick Company

St. Louis

EXPLANATORY

The enclosed vertical and horizontal brick scales are divided at a scale of $\frac{1}{4}$ of an inch to the foot, the vertical scales giving the height of one brick plus one joint for varying size brick and joint, the horizontal scales, lettered A to G, inclusive, numbered in lengths of one brick, the basis of measurement being one and one-half brick which is given as A— $12\frac{1}{2}$ ", etc. This means that one brick in length, plus one header or half brick, and two joints, equal $12\frac{1}{2}$ ". By obtaining the average length, width and thickness of the actual brick decided upon and adding to these sizes the width of joint desired, the proper scale to use is easily selected. Example—if the selected brick is 8"x4"x $2\frac{1}{4}$ " and a $\frac{1}{2}$ " joint is desired, the vertical scale to use would be $2\frac{1}{4}$ " plus $\frac{1}{2}$ "= $2\frac{3}{4}$ ". The horizontal scale would be 8" plus $\frac{1}{2}$ " plus 4" plus $\frac{1}{2}$ "= 13 ". The slight variations in the horizontal scales from actual brick sizes, plus proposed joint, are immaterial in the building and the nearest scale to such calculated dimensions may be used and the plans figured to agree with the brick tables. These scales may be used in the same manner as the usual architect scales or may be slipped under the tracing paper or cloth and the dimensions transferred by direct tracing.

HYDRAULIC-PRESS BRICK COMPANY

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